

South Dakota Science and Technology Authority Board of Directors
Meeting Minutes
Thursday, June 19, 2014
Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 9:01 AM Mountain Time (MT) on Thursday, June 19, 2014 in the 2nd Floor Vault Conference Room at the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE IN PERSON

Dr. Ani Aprahamian
Mr. Paul Christen
Ms. Pat Lebrun
Chairperson Casey Peterson
Mr. Ron Wheeler

MEMBERS OF THE BOARD IN ATTENDANCE VIA TELEPHONE

Mr. Thomas Adam
Mr. Dana Dykhouse

SDSTA STAFF

Ms. Michelle Andresen, Administrative Assistant
Mr. Tim Engel, Legal Counsel
Ms. Nancy Geary, Chief Financial Officer (by telephone)
Mr. Mike Headley, Executive Director
Dr. Jaret Heise, Science Liaison Director
Ms. Sharon Hemmingson, Business Services and Contracts Manager
Ms. Mandy Knight, User Support Office Manager
Mr. William McElroy, Director of Underground Access
Mr. Daryl (KC) Russell, Cultural Diversity Coordinator
Ms. Constance Walter, Communications Director

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Mrs. Donna Christen, Board Member's spouse
Mr. Pranam Dey, Davis Bahcall Scholar
Mr. Layne Droppers, Davis Bahcall Scholar
Ms. Mattison Flakus, Davis Bahcall Scholar
Ms. Madison Jilek, Davis Bahcall Scholar
Dr. Kevin Lesko, Sanford Underground Research Facility Operations Head (by telephone)
Dr. Peggy Norris, Education and Outreach (E&O) Deputy Director (BHSU)
Ms. Deirdre Peck, Davis Bahcall chaperone and Aberdeen High School teacher
Mr. Jack Storm, Davis Bahcall Scholar
Ms. Kassia Symstand, Davis Bahcall Scholar
Ms. Allison VanHorn, Davis Bahcall Scholar
Mr. Noah Watkins, Davis Bahcall Scholar
Ms. Rachel Williams, Davis Bahcall Scholar
Ms. Hannah Wisser, Davis Bahcall Scholar

ITEM 1. – CALL TO ORDER

Chairman Peterson called the meeting to order at 9:01 AM (MT). Roll call was held. All members were present in person or by telephone. Chairman Peterson asked audience members to introduce themselves.

Mr. Adam joined the meeting by telephone at 9:03 AM.

ITEM 2. – APPROVE AGENDA

Chairman Peterson asked to revise the proposed agenda to move Items 12 and 13 to follow Item 4.

Motion by Mr. Christen and second by Ms. Lebrun to approve the agenda as revised. Motion passed unanimously.

ITEM 3. – APPROVE MINUTES

Chairman Peterson asked if there were any questions and requested a motion to approve the Minutes of the March 20, 2014 meeting. There were none.

Motion by Mr. Wheeler and second by Dr. Aprahamian to approve the Minutes of the March 20, 2014 meeting as presented. Motion passed unanimously.

ITEM 4. – AUDIT COMMITTEE REPORT

Ms. Lebrun advised the board that certain updates were made to the Audit Charter in order to conform with the current practices that coincide with the federal reporting requirements. Ms. Lebrun presented the submitted charter for approval.

Motion by Ms. Lebrun and second by Mr. Wheeler to approve the updated Audit Charter. By roll call vote, the motion passed unanimously.

Ms. Lebrun requested a motion to approve the audit findings report presented at the March board meeting.

Motion by Mr. Wheeler and second by Mr. Christen to approve the audit report as presented. By roll call vote, the motion passed unanimously.

Chairman Peterson requested a motion to replace Mr. Dykhous with Mr. Christen on the 2015 Audit Committee beginning July 1, 2014. Chairman Peterson said that due to Mr. Christen's tenure with a publicly-traded corporation and his involvement in federal banking statutes, he is an expert on financial reporting and has the expertise to fill this position. Next, Mr. Dykhous was recognized for his service on the committee. Chairman Peterson then thanked Ms. Lebrun for agreeing to continue to serve as the Chair of the Audit Committee.

Motion by Mr. Adam and second by Mr. Dykhous to approve the members of the 2015 Audit Committee as presented. By roll call vote, the motion passed unanimously.

ITEM 12 - REPORT FROM NOMINATING COMMITTEE

Mr. Dykhous and Dr. Aprahamian comprised the Nominating Committee. Mr. Dykhous said that the Nominating Committee conducted two meetings with the purpose of nominating the slate of officers for the 2014-2015 board year and referred to the minutes in the board packet. The first meeting discussed the nominated slate: Mr. Casey Peterson as Chairperson, Mr. Ron Wheeler as Vice-Chairperson, and Ms. Lebrun as Secretary Treasurer. The second meeting discussed the Amended and Restated By-Laws dated September 19, 2013 and referred to Article III, Section 1 that calls for two or more Vice-Chairpersons.

The Nominating Committee submitted the following slate of officers:

Chairperson: Mr. Casey Peterson

Vice-Chairpersons: Mr. Ron Wheeler and Mr. Dana Dykhouse

Secretary Treasurer: Ms. Patricia Lebrun

Chairman Peterson asked if there were any other nominations. There were none.

Motion by Mr. Adam and second by Mr. Christen to accept the report from the nominating committee as presented. By roll call vote, the motion passed unanimously.

ITEM 13 - ELECT OFFICERS

Motion by Mr. Adam and second by Dr. Aprahamian to elect the slate of officers proposed by the nominating committee, consisting of Mr. Casey Peterson as Chairperson, Mr. Ron Wheeler and Mr. Dana Dykhouse as the Vice-Chairpersons and Ms. Pat Lebrun as Secretary/Treasurer. By roll call vote, the motion passed unanimously.

ITEM 5. – REPORT FROM EXECUTIVE DIRECTOR

SDSTA Executive Director Mr. Mike Headley said there were two administrative items regarding declaration of surplus property: a 150hp Grundfos pump and motor and six uninterruptible power supplies (UPS). Each are no longer in use. Because the UPSs have no value, approval by the board for the power supplies is not required.

Motion by Mr. Wheeler and second by Ms. Lebrun to approve the declaration of surplus property for the 150hp Grundfos pump and motor from the Ross Shaft. By roll call vote, the motion passed unanimously.

Mr. Headley stated that the Business Services Department conducted a self-audit on a select number of contracts per the Risk Management Protocol. No issues were identified.

In regard to the SDSTA safety performance, Mr. Headley said there were no recordable injuries for researchers or contractors for 2014 to date. During the first six months, there were two SDSTA employee recordables, compared to seven in the first half of 2013. He said the goal is to reduce the number of recordables by 50% in 2014.

Mr. Headley announced that the new Environmental, Health and Safety (EHS) Director was selected and will start on June 30.

Mr. Headley said the underground activity headcount has increased due to the following activities: Large Underground Xenon (LUX) is preparing for the 300 live-day run and the ultra-pure lead (Pb) shield assembly for the MAJORANA DEMONSTRATOR (MJD) is being assembled.

The Davis Campus Heating, Ventilation and Air-Conditioning (HVAC) upgrade has been completed and will be operational next week. Geotechnical studies were completed for the Long-Baseline Neutrino Experiment (LBNE). A total of 2,700 feet of core samples was drilled and are currently in lab studies.

The South Dakota Research Excellence: A Critical Hallmark (REACH) Committee and Research and Commercialization Council (RCC) meetings were held onsite and thirty members were provided an underground tour. Mr. Headley commented that South Dakota State Representative Kristi Noem toured the 4850L Davis Campus at the beginning of June with himself, Chairman Peterson and South Dakota School of Mines and Technology President Heather Wilson.

Future experiment updates were then discussed by Mr. Headley and included: the LUX-ZEPLIN (LZ), LBNE, Low-Background Counting Facility (LBCF) and Compact Accelerator System for Performing Astrophysical Research (CASPAR).

Mr. Headley said the Particle Physics Strategic Plan was released by the Particle Physics Project Prioritization Panel (P5) in May. It outlined the ten-year strategic plan for High Energy Physics in the United States. Mr. Headley said there were strong recommendations related to SDSTA. Mr. Wheeler commented that one of the first priorities is to establish the LBNE detector early in program per the strategic plan. Dr. Aprahamian added that the American Physical Society issued a public letter of support in regard to the strategic plan.

Mr. Headley said the Sanford Lab Homestake Visitor Center construction will commence in early July. The groundbreaking ceremony is scheduled for June 30 at 10:00 AM MT at the visitor center.

Mr. Dykhouse departed the meeting at 9:38 AM.

Mr. Headley introduced Science Liaison Director Dr. Jaret Heise who provided a year-end overview of MJD and LUX experiments. Dr. Heise began with highlights from the following experiments: the Center for Ultra-Low Background Experiments in the Dakotas (CUBED), Berkeley Low-Background Facility (BLBF), Isotopic Separation and Ultra-Purification (ISUP) and NASA Astrobiology. Ms. Lebrun asked if there was much redundancy between the BLBF and MJD experiments. Dr. Heise stated the research capacity far exceeds either experiment and they are complimentary to each other. Dr. Aprahamian inquired about the CUBED shield comprised of Pb bricks, which are coated with borated paraffin. Dr. Heise advised the coating and cleaning of the bricks were conducted off-site at Black Hills State University (BHSU) and transported to SDSTA. Dr. Heise concluded his presentation with an update on the two Dave Bozied interns who are assisting researchers at the Davis Campus.

Mr. Headley introduced Underground Access Director Mr. William McElroy who provided an update on the Ross Shaft Refurbishment Project. Mr. McElroy noted the project is a third completed. After a 2013 injury in the Ross Shaft, a comprehensive revision to Standard Operating Procedure (SOP) No. 0053 was conducted in order to streamline shaft refurbishment operation controls. An authorization to proceed was approved in May and shaft personnel have returned to working full-time installing new steel.

Mr. McElroy said in an effort to reduce noise and vibration exposure while drilling, the Engineering, EHS, Facility Infrastructure and Underground Access Departments conducted a trade study with four different jackleg drill models. The noise and vibration exposure results resulted in Sanford Lab procuring a Boart-Longyear drill for use underground.

A top down maintenance plan has been implemented at the Yates Shaft along with a software database and manifest system to log the timber baseline inspection data. Mr. McElroy stated the shaft is healthier and stronger each day as maintenance continues with removing old timber and muck. Ms. Lebrun inquired as to where the debris is deposited. Mr. McElroy advised it is taken to the landfill. He advised that the Engineering Department has implemented timber sag monitors to record and monitor potential movement of the timber and rock wall. Mr. McElroy asked if there were any questions. Chairman Peterson asked if an electronic monitoring system would be an option. Mr. McElroy said that an electronic system is expensive and fiber in the shaft has the potential to fail.

Mr. Headley asked the board to approve the ratification of the Memorandum of Understanding between Homestake Visitor Center, Inc. and Lead Area Chamber of Commerce, Inc. (HVC/LACC) and the SDSTA concerning the Creation and Operation of the Sanford Lab Homestake Visitor Center and Waiver of Liability. Chairman Peterson asked if there were any questions. There were none.

Motion by Mr. Wheeler and second by Mr. Adam to ratify the MOU between HVC/LACC and SDSTA and the Waiver of Liability. By roll call vote, the motion passed unanimously.

Mr. Headley then asked for board approval to sign the Homestake Visitor Center construction change order for the Ainsworth-Benning Construction, Inc. contract and the guaranteed maximum price (GMP) to \$3.35 million. Chairman Peterson asked if there were any questions. There were none.

Motion by Ms. Lebrun and second by Mr. Wheeler to accept the construction change order with the GMP of \$3.35 million. By roll call vote, the motion passed unanimously.

Chairman Peterson asked for a motion to accept the Executive Director's report.

Motion by Mr. Wheeler and second by Mr. Christen to accept the Executive Director's report. By roll call vote, the motion passed unanimously.

Chairman Peterson moved Item 7 to follow Item 5 on the agenda to accommodate Sanford Underground Research Facility Operations Head Dr. Kevin Lesko's schedule.

ITEM 7. – UPDATE OF PARTICLE PHYSICS PROJECT PRIORITIZATION PANEL (P5)

Dr. Lesko advised the board on the plan of physics priorities based on the science opportunities established and budgetary realities for the next decade. Several high profile programs with potential deployments are being considered for Sanford Lab. He said that two of these programs are the LBNE and the Generation 2 (G2) LZ experiment. Dr. Lesko closed by saying the FY 2015 budget was set and this is very good news for underground physics in the United States and for Sanford Lab.

ITEM 6. – INTRODUCE 2014 DAVIS-BAHCALL SCHOLARS

Chairman Peterson introduced Education and Outreach (E&O) Deputy Director Dr. Peggy Norris who said the scholars are in their second of a five-week program. The scholars will visit the Sudan Mine in Minnesota, Fermilab and Argonne National Laboratories in Illinois, and Gran Sasso and Frascati National Laboratory in Italy. She asked the Davis-Bahcall scholars to introduce themselves and announce the university each will be attending in the fall. Dr. Norris asked if there were any questions. She closed by stating the scholars will blog to the Sanford Lab website during their travels.

Dr. Aprahamian said it was a pleasure meeting the scholars and gave an assignment during their visit to Gran Sasso. She asked them to take notes of the locations of the dark matter and nuclear physics experiments so that when they return, they can explain where the advantages and disadvantages are worldwide and why Sanford Lab is a world competitive location. Chairman Peterson thanked the group and congratulated them on their future in science. He said the SDSTA board is very supportive of their career decisions.

Dr. Lesko departed the meeting.

The board recessed at 10:40 AM and reconvened at 10:50 AM.

ITEM 8. – FINANCIAL REPORT

Mr. Headley introduced SDSTA Chief Financial Officer Ms. Nancy Geary via telephone. Ms. Geary began by reporting that the main reason that SDSTA was over budget was due to three pay periods during the month.

The LBNL subcontract was also over budget slightly due to a three-pay period month and an armature repaired at the Yates Hoist. Mr. Headley said the areas overspent were primarily due to weather, heating, water and the Yates motor repair. Mr. Wheeler also said that these expenses are in the planned reserve. Ms. Geary continued by stating the electric expenses were slightly higher due to a price increase by Black Hills Power.

Motion by Mr. Wheeler and second by Mr. Christen to accept the financial report as presented. By roll call vote, the motion passed unanimously.

Ms. Geary discussed the proposed SDSTA budget for FY 2015. She said the administration budgets will increase slightly due to employee raises of up to two percent based on performance, executive office budget increase, E&O summer intern expenses and science liaison for subcontract expenses. Also, the communication budget will be removed from the National Environmental Policy Act (NEPA) contract and transferred to the SDSTA budget. Mr. Wheeler verified the increase of \$30 Thousand was due to the reallocation of expenses. Mr. Headley said the LBNE funds for staff are coming to completion for the NEPA Environmental Assessment.

Ms. Geary commented on the federal funding of approximately \$14.9 million, which funds the LUX and MJD contracts as well as a few small contracts with Fermilab. Ms. Geary asked if there were any questions. There were none.

The FY 2014-2015 CAPEX budget requires additional approval of approximately \$9.1 million for new and existing projects such as the Ross refurbishment, Yates Shaft improvements, Sanford Visitor Center Development, CASPAR experiment development underground, BHSU Jonas Science Building renovation and Hazard Mitigation work. Some of these project expenses have a possibility to carry over into next year.

Mr. Headley said the construction cost estimate for CASPAR facility design is currently over the initial budget target and additional cost reduction discussions will be conducted. He asked for board approval to continue with the rehabilitation of the space and the design along with some minor long lead items but not to approve the start of construction.

¹Motion by Mr. Wheeler and second by Mr. Christen to approve the FY 2015 administration and federal budget as presented minus the CASPAR budget. By roll call vote, the motion passed unanimously.

Motion by Mr. Christen and second by Ms. Lebrun to approve the CASPAR budget. Dr. Aprahamian abstained from voting. By roll call vote, the motion passed unanimously.

Ms. Geary and Mr. Adam departed the meeting at 11:14 AM.

ITEM 9 - EXECUTIVE SESSION

Motion by Ms. Lebrun and second by Mr. Christen to enter into executive session to consult with legal counsel concerning contractual and legal matters. By roll call vote, the motion passed unanimously.

The board recessed at 11:14 AM for lunch and Executive Session and reconvened at 12:14 PM.

ITEM 10. – REPORT FROM EXECUTIVE SESSION

Chairman Peterson reported that the board consulted with legal counsel concerning contractual and legal matters. No action was taken.

Motion by Mr. Wheeler and second by Mr. Christen to approve executive session. By roll call vote, the motion passed unanimously.

ITEM 11. – REVIEW OF UPDATED POLICIES AND PROCEDURES

Mr. Headley briefly discussed the updated and new policies listed below and Mr. Engel had reviewed the policies. He asked if there were any questions or comments. There were none.

Policy 2:3 Drug and Alcohol Testing

Policy 3:4 Invoice and Receipt Policy

Policy 4:15: Worksite Reduction and Management (new policy)

¹ The budget “as presented” is attached at the end of the June 19, 2014 Minutes.

Motion by Mr. Wheeler and second by Mr. Christen to approve the above listed policies as presented to board. By roll call vote, the motion passed unanimously.

Chairman Peterson asked if there were any questions in regard to the annual Conflict of Interest Statement requiring signature by each board member annually. There were none.

ITEM 14. – REPORT ON REACH COMMITTEE

Ms. Lebrun said the REACH Committee is comprised of the RCC and other members appointed by the Governor. The committee is responsible for all the Experimental Program to Stimulate Competitive Research (EPSCoR) projects in South Dakota. At the meeting, members gave an update on the science and technology plan for South Dakota. She said SDSTA contributes to help fulfill the plan. Conducting the meeting at Sanford Lab allowed the committee to better understand and experience the activities and research.

Chairman Peterson thanked Ms. Lebrun for her involvement on the REACH Committee. Mr. Headley also thanked Ms. Lebrun for conducting the meeting at SDSTA.

ITEM 15. – CONFIRM DATE AND TIME FOR NEXT BOARD MEETING

Chairman Peterson asked if there were any concerns with the next board meeting on Thursday, September 18, 2014 at 9:00 AM (MT). There were none.

ITEM 16. – BOARD COMMENTS

Ms. Lebrun said this was a great meeting. She enjoyed meeting the Davis Bahcall Scholars and suggested a lunch invitation to all the scholars at next year's June board meeting.

Mr. Christen said it was a great meeting with excellent information and that our science future for the country was the Davis Bahcall scholars.

Mr. Wheeler said he echoes Ms. Lebrun's and Mr. Christen's comments in regard to the meeting and introductions by the scholars. He congratulated Mr. Headley on his first year as Executive Director and said he has done a marvelous job.

Mr. Headley said he appreciates the support of the Board of Directors and thanked Mr. Wheeler for his comments. He also appreciates the staff of 125 personnel who are dedicated to safety and who complete great work for SDSTA. Mr. Headley thanked User Support Office Manager Ms. Mandy Knight and Administrative Assistant Ms. Michelle Andresen for all their board meeting support.

Dr. Aprahamian said she enjoyed meeting the Davis Bahcall scholars as well.

Chairman Peterson thanked Mr. Wheeler for passing the torch so efficiently and stated it has been a successful transition to Mr. Headley as Executive Director. He thanked everyone for their time and effort.

ITEM 17. – ADJOURN

Chairman Peterson asked if anyone had any other questions or comments and then called for a motion to adjourn.

Motion by Mr. Christen and second by Ms. Lebrun to adjourn. Motion passed unanimously.

Meeting adjourned at 12:15 PM.